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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method for manufacturing multi-wall carbon nanotubes comprising:

a process for preparing fullerene/carbon nanotube hybrid structures wherein assembled fullerenes, these being fullerenes that are linked, are housed within carbon nanotubes, and

a process whereby the hybrid structures are subjected to electron beam irradiation while in a heated state, thereby forming interior tubes from the assembled fullerenes;

wherein the hybrid structures are subjected to irradiation with the electron beams while in a state of being heated to 80-700°C.

2. (Original) A method as set forth in Claim 1, wherein the assembled fullerenes are essentially composed of C_{60} fullerenes.

3. (Original) A method as set forth in Claim 1, wherein the carbon nanotubes forming part of the hybrid structures are essentially single-wall carbon nanotubes.

4. (Cancelled)

5. (Currently Amended) A method as set forth in Claim [[4]] 1, wherein the hybrid structures are subjected to irradiation with the electron beams while in a state of being heated to 100 ~ 500°C.

6. (Original) A method as set forth in Claim 1, wherein the hybrid structures are subjected to irradiation with the electron beams having an accelerating voltage of 80 ~ 250 kV.

7. (Original) A method as set forth in Claim 1, wherein the hybrid structures are subjected to irradiation with the electron beams at 100 ~ 500 $C/cm^2/min$.

8. (Original) A method as set forth in Claim 1, wherein the hybrid structures are subjected to irradiation with the electron beams at an electron beam density of 1 ~ 8 $\times 10^{-11} A/cm^2$.

9. (Original) A method as set forth in Claim 1, wherein the hybrid structures are subjected to irradiation with the electron beams for 15 minutes or less.

10. (Cancelled)

11. (Original) A method as set forth in Claim 1, wherein the hybrid structures are subjected to irradiation with the electron beams having an accelerating voltage of 80 ~ 150 kV.

12. (Original) A method as set forth in Claim 1, wherein the hybrid structures are subjected to irradiation with the electron beams at an electron beam density of 0.5 ~ $5 \times 10^{-11} A/cm^2$.

13. (Previously Presented) A method as set forth in Claim 1, wherein the hybrid structures are maintained in the heated state for a specified period before irradiation with the electron beams begins.

14. (Previously Presented) A method as set forth in Claim 1, wherein, after the irradiation of the hybrid structures with the electron beams has finished, resulting products thereof are maintained for a specified period within the same temperature range as during irradiation.

15. (Original) A method as set forth in Claim 1, wherein a process for preparing the hybrid structures includes a treatment whereby the fullerenes and the carbon nanotubes having an opening therein are brought together, and the fullerenes are filled into the carbon nanotubes.

16-21. (Canceled)

22. (Previously Presented) The method of claim 1, wherein recovery from damage caused by the irradiation is accelerated by the heated state of the hybrid structures.

23. (Cancelled)

24. (Cancelled)

25. (New) A method for manufacturing multi-wall carbon nanotubes comprising:

a process for preparing fullerene/carbon nanotube hybrid structures wherein assembled fullerenes, these being fullerenes that are linked, are housed within carbon nanotubes, and

a process whereby the hybrid structures are subjected to electron beam irradiation while in a heated state, thereby forming interior tubes from the assembled fullerenes;

wherein the hybrid structures are subjected to irradiation with the electron beams while in a state of being heated to 70-250°C.